

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,363	04/25/2001	Ahmad Ansari	7780/13 (T00341) 6562	
7590 11/30/2006			EXAMINER	
Brinks Hofer Golson & Lione			RAMAN, USHA	
P O Box 10395 Chicago, IL 6		•	ART UNIT	PAPER NUMBER
<b>0</b> /			2623	
			DATE MAILED: 11/30/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/842,363	ANSARI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Usha Raman	2623				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  B6(a). In no event, however, may a reply be ting  ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>03 A</u>	ugust 2006.					
	action is non-final.					
<u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1 and 3-24 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 3-24</u> is/are rejected.						
Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.	·				
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119		•				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1)  Notice of References Cited (PTO-892)  2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4)	ı (PTO-413)				

## Response to Arguments

 Applicant's arguments with respect to claims 1, 11, 18 and 21 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 3-4, 6-13, 15-19 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tillman et al. US Pat. (6,496,980) in view of McMahon (US Pat. 7,020,195).

With regards to claim 1, 11 and 21, Tillman discloses a system and a method of streaming a video content representing a program to a subscriber terminal comprising"

Decomposing video content (encoding layered streams) into a plurality of video quality portions (see column 5, lines 14-17), a low quality video portion of the plurality of video quality portions comprising the program at a video quality lower than (base layer lower than enhanced layer) at least one of the plurality of video quality portions (see abstract).

Downloading a low quality video portion to the subscriber terminal via a DSL (see column 3, lines 58-64) for storage locally at the subscriber terminal (see column 7, lines 35-38);

Receiving from the subscriber terminal a selection request (replay request) for program corresponding to the video content after downloading the low quality video portion (see column 8, lines 46-50);

Downloading at least a one of plurality of video quality portions having a video quality higher than a low quality video portion to the subscriber terminal via the digital subscriber line (see column 6, lines 14-17) in response to the selection request (see column 7, lines 39-45).

Tillman only teaches the application of base enhancement layers for streaming video content over a bandwidth constrained network and does not teach the step of applying base enhancement methods to complete downloaded copy of the base layer (low quality) video stored at the subscriber terminal.

McMahon discloses a base enhancement video system wherein a complete copy of the base layer (low quality vide) maybe distributed transmitted and stored by consumers, and then the enhancement layer is downloaded over a communication network. See column 1, lines 52-58 and claim 17. McMahon therefore teaches the step applicability of the base enhancement layering in a system where a complete copy of a video is stored locally, wherein a user can view the base quality video available over a physical medium at the subscriber terminal or upon downloading the enhancement layer, watch the high quality video.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Tillman in view of McMahon, by applying base enhancement layering to complete downloaded copy of a low quality video, thereby enabling the consumer watch the high quality video upon downloading the enhancement layer over the DSL or to watch a low quality video in its entirety when insufficient resources are available.

With further regards to claim 11, the modified system comprises a video repository for storing a plurality of higher quality parts of decomposed videos (see Tillman: column 4, lines 9-12, lines 17-27, and McMahon: column 7, lines 63-66).

With regards to claim 3, the modified system further comprises video content.

See Tillman: abstract.

With regards to claims 4, and 13, the modified system further comprises the step of compressing the video content using a transform based compression technique (H.263+ and MPEG-2). See Tillman: column 5, lines 14-17 and McMahon: column 1, lines 49-51.

With regards to claims 6, and 15, the modified system further comprises the step of downloading one of plurality of video quality portions having a quality higher than the low quality video portion to the subscriber in real time. See Tillman: column 3, lines 22-27 and column 7, lines 39-45.

With regards to claims 7, and 16, each of the video quality portions represents a different level of service quality in the modified system. See Tillman: column 5, lines 64-67.

Application/Control Number: 09/842,363

Art Unit: 2623

With regards to claims 8, 17, 23 and 24, the modified system further comprises the step of determining a transmission bandwidth available and selecting one of video quality portions having a quality higher than the low quality video portion based on the download bandwidth (see Tillman: column 4, lines 59-column 5, line 3).

With regards to claims 9, and 22, the modified system comprises the step of organizing video quality portions in a pyramidal scheme such that each successive enhancement layer provides an incremental quality benefit. See Tillman: column 6, lines 60-64.

With regards to claim 10, the modified system comprises the step of recomposing a plurality of downloaded video quality portions representing the program at subscriber terminal for presenting the content to the user. See Tillman: column 5, lines 64-66 and column 7, lines 42-48.

With regards to claim 12, the modified system further comprises asymmetrical bandwidth for the communication path. See Tillman: column 4, lines 7-8.

With regards to claim 18, see claim 1. With further regards to claim 18, the modified system further discloses a set top box (see Tillman: column 3, line 51), comprising:

A memory (client cache 50) for locally storing the low quality video portions of the compressed content files representing programs (see Tillman: column 42-45 and McMahon: column 1, lines 52-58 and claim 17)

Application/Control Number: 09/842,363

Art Unit: 2623

A user interface for allowing a user to select one of the compressed content files for viewing after storing the low quality video portion (see Tillman: column 4, lines 31-36)

A network interface (see Tillman: column 3, lines 62-65) for causing a remote content repository (signal source, Tillman: column 4, lines 9-12) to download a remotely stored portion of the over a DSL network in response to the user selection (see Tillman: column 7, lines 39-45);

A re-composition device for recombining the locally stored and remotely stored portions of the content file (see Tillman: column 10, lines 64-66); and

A display interface for transferring the recombined content file to a display unit (see Tillman: column 4, lines 49-50, and column 10, lines 66-67).

With regards to claim 19, the set top box further comprises a decoder for decompressing the recombined compressed content file (see Tillman: column 5, lines 30-35).

4. Claims 5, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tillman et al. US Pat. (6,496,980) in view of McMahon (US Pat. 7,020,195) as applied to claims 1, 11 and 18 respectively above, and in further in view of Payton (US Pat. 5,790,935).

With regard to claims 5, 14 and 20 the modified system does not comprise downloading the base layer video to the subscriber during off peak hours.

Art Unit: 2623

Payton discloses the step of downloading a program to the subscriber terminal during off peak hours in order to offload the system's peak bandwidth requirement to the subscriber. See abstract.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system in view of Payton by downloading the base quality video during off peak hours, thereby offloading peak bandwidth and reducing bandwidth during peak hours.

## Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2623

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR

CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600